- 1. (Currently amended) A method for recovering mesenchymal stem cells, comprising:
- (a) providing a cell mixture comprising mesenchymal stem cells and other cells;
- (b) seeding the cell mixture in a culture device comprising an upper plate with pores, said pore size ranges from about 0.4 to 20 microns in diameter, and a lower plate base to separate mesenchymal stem cells from other cells through the pores, wherein the mesenchymal stem cells retain and adhere onto the upper plate, and the other <u>small-sized</u> cells pass through the pores to the lower plate base; and
 - (c) recovering the mesenchymal stem cells from the upper plate.
 - 2. (Canceled)
 - 3. (Canceled)
- 4. (Previously presented) The method as claimed in claim 1, wherein the cell mixture comprises mammalian mesenchymal stem cells.
 - 5. (Canceled)
- 6. (Currently amended) The method as claimed in claim 5 4, wherein the cell mixture comprises human mesenchymal stem cells.
- 7. (Currently amended) The method as claimed in claim 5 4, wherein the cells are selected from the group consisting of a bone marrow, an

embryonic yolk sac, a placenta, an umbilical cord, a fetal, adolescent or adult body fluid, and a fetal, adolescent or adult tissue.

8. (Canceled)

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- 9. (Previously presented) The method as claimed in claim 1, wherein the mesenchymal stem cells are differentiable into tissues comprising bone, adipose, or cartilage.
- 10. (Previously presented) The method as claimed in claim 1, wherein the mesenchymal stem cells are characterized by CD34-.
- 11. (Previously presented) The method as claimed in claim 9, wherein the mesenchymal stem cells are cultured in 10% fetal bovine serum-supplemented Dulbecco's modified Eagle's medium containing 1 g/L of glucose.

12-20. (Withdrawn)

21-22. (Canceled)

23. (Previously presented) The method as claimed in claim 5, wherein the body fluid is a bone marrow aspirate.

24-31. (Canceled)

32. (Previously presented) the method as claimed in claim 1, further comprising, after step (b), a step of removing cells not adhered on the plate by changing a culture medium.